Technical High School Study

Preliminary Interim Report to the Legislature

November 2008

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TECHNICAL HIGH SCHOOL STUDY

Preliminary Interim Report to the Legislature

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Executive Summary

This is the Preliminary Interim Report for activities to date regarding Section 308 of Second Substitute Senate Bill 6377 of the 60th Legislature from the 2008 regular session that requested the Office of the Superintendent of Public Instruction (OSPI) to conduct a feasibility study to create technical high schools in Washington State. The Office of the Superintendent of Public Instruction contracted with the Center for Research & Data Analysis at Educational Service District #113 to conduct the feasibility study.

The purpose of this technical high school feasibility study directed by Second Senate Bill 6377 Section 308 is the following: 1) The Office of the Superintendent of Public Instruction shall conduct a feasibility study to create technical high schools in Washington State. In conducting the study, OSPI shall convene an advisory committee including, but not limited to, representatives from school districts, high schools, skill centers, community and technical colleges, workforce development councils, the workforce training and education coordinating board, the Washington Association for Career and Technical Education, the Washington State Apprenticeship and Training Council, and the State Board for Community and Technical Colleges. Subject to available funds, OSPI shall contract with a third party to support the study, including examining technical high school models in other states. 2) The feasibility study shall examine and make recommendations on the following issues:

- The definition of a technical high school and how a technical high school might differ from current comprehensive high schools, alternative high schools, or skill centers.
- The governance structure for technical high schools, which may be within a single district, a cooperative of multiple districts, or other new governance structures that may be considered.
- Funding models and estimated costs to support technical high schools, including both operating and capital funds.
- Whether technical high schools should focus on particular student populations or be structured as magnet schools or academies with a particular programmatic focus.
- Whether technical high schools should operate with a two-year or four-year program or with part-time or full-time attendance.
- The implications of accountability for student achievement with a technical high school, including adequate yearly progress.
- Options, strategies, and estimated costs for possible transition of selected current high schools or skill centers to a technical high school model.

3) The Office of the Superintendent of Public Instruction shall submit an interim progress report to the Governor and the education and fiscal committees of the Legislature by December 1, 2008 and a final report with recommendations by September 15, 2009.

This Preliminary Interim Report summarizes the first of three advisory committee meetings for this study held on September 18, 2008 at New Market Skills Center in Tumwater, Washington. Individual and small group meetings with Advisory Committee representatives will be on-going to continue to inform the evaluators with information regarding the technical high school feasibility study.

I. Overview

The following is a summary of the first of three Advisory Committee meetings for the feasibility study to create technical high schools in Washington State, per Section 308 of the Second Substitute Senate Bill 6377. The meeting was held September 18, 2008 at New Market Skills Center in Tumwater, Washington. The objectives of this feasibility study are to start the collection and exploration of the following issues:

a) The definition of a technical high school and how a technical high school might differ from current comprehensive high schools, alternative high schools, or skill centers.
b) The governance structure for technical high schools, which may be within a single district, a cooperative of multiple districts, or other new governance structures that may be considered.
c) Funding models and estimated costs to support technical high schools, including both operating and capital funds.
d) Whether technical high schools should focus on particular student populations or be structured as magnet schools or academies with a particular programmatic focus.
e) Whether technical high schools should operate with a two-year or four-year program or with part-time or full-time attendance.
f) The implications of accountability for student achievement with a technical high school, including adequate yearly progress.
g) Options, strategies, and estimated costs for possible transition of selected current high schools or skill centers to a technical high school model.

The Office of the Superintendent of Public Instruction contracted with the Center for Research & Data Analysis at Educational Service District #113 to conduct the feasibility study regarding the creation of technical high schools in Washington State. The Office of the Superintendent of Public Instruction shall submit an interim progress report to the Governor and the education and fiscal committees of the Legislature by December 1, 2008 and a final report with recommendations by September 15, 2009.

II. Advisory Committee

A. Meeting

In attendance at the first Advisory Committee meeting were representatives from school districts, high schools, skill centers, community and technical colleges, workforce development councils, the Workforce Training and Education Coordinating board, the Washington Association for Career and Technical Education, the Washington State Apprenticeship and Training Council, and the State Board for Community and Technical Colleges. Also in attendance were representatives from universities and colleges, businesses, industries, and manufacturing, labor market and economic analysis, Educational Service Districts, OSPI, and other interested participants. More specifically the Advisory Committee includes the following:

B. Members

School Districts

Jay Wood, School Board Member, Tumwater School District
Jesus Hernandez, Vice Chair, Higher Education Coordinating Board

Jon Swett, Executive Director for High Schools, Spokane Public Schools
Saundra Hill, Superintendent, Pasco School District
Dennis Maguire, Associate Superintendent, Pasco School District
Dan Steele, Assistant Executive Director, Washington State School Directors' Association

High schools
Jerry Bender, Director of Governmental Relations, Association of WA School Principals
Scott Seamen, Principal, Tumwater High School
Scott McComb, Coordinator, Internships, & Mentoring, Aviation High School
Reba Gilman, CEO/Principal, Aviation High School

Skill Centers
Todd Moorhead, Assistant Director, Puget Sound Skill Center
Joe Kinerk, Executive Director, New Market Skills Center
Donald Howell, Director, Spokane Skills Center
Jacob Jackson, Director, North Olympic Peninsula Skills Center

Washington State Apprenticeship and Training Council
Alan O. Link, Secretary-Treasurer, Washington State Labor Council, AFL-CIO

Workforce Development Councils
Kris Stadelman, CEO Seattle-King County Workforce Development Council

Workforce Training and Education Coordinating Board
Wes Pruitt, Policy Analyst/Legislative Liaison, Workforce Training and Education Coordinating Board

Washington Association for Career and Technical Education
Kathleen Lopp, Exec. Director, Washington Association for Career and Technical Education
David Leinweber, Technology Education Teacher, Kingston High School
Michael Christianson, Director, Career and Technical Education, Bethel School District
Jim Noelder, Director, Career and Technical Education, North Kitsap School District
Nancy Hawkins, Director, Career & Technical Education, Federal Way Public Schools
Pamela Darling, Program Director, NorthEast Vocational Area Cooperative
Marianna Goheen, Director, Office of College & Career, Highline Public Schools

State Board for Community and Technical Colleges
Michael Tate, Underserved Populations, State Board of Community & Technical Colleges
Tiffanny Merkel-Rinke, Workforce Education, State Board of Community & Technical Colleges

Community and Technical Colleges
John Grant, Associate Dean High School Programs, Bates Technical College
Dr. Sharon McGavick, President, Lake Washington Technical College
Andrea Olson, J.D., Exec. Dir. of College Relations, Lake Washington Technical College

Colleges and Universities
Robert Olsen, Ph.D. Professor and Associate Dean, College of Engineering and Architecture, Washington State University
Maureen Munn, Director, Education Outreach, Department of Genome Sciences, University of Washington School of Medicine
Clarissa Dirks, Assistant Professor of Biology, Evergreen State College

Active Participants

Jeff Estes, Manager, Science and Engineering Education, Pacific Northwest National Laboratory (Operated by Battelle for the U.S. Department of Energy)
Theresa Britschgi, Director, Bioquest, Seattle Biomedical Research Institute
Ed Halloran PE, CMfgE, Campaign Director, Dream It Do It
Dana Riley-Black, Director, Center for inquiry Science, Institute for Systems Biology
Terry Byington, Executive Director, AeA (formerly the American Electronics Association)
Jane Field, Labor Market and Economic Analysis, Employment Security Department
Zithri Ahmed Saleem, Director of Education, Technology Access Foundation
Mike Roberts, Consultant, Public Policy/Finance, Mike Roberts & Associates
Jeanne Chowning, Education Director, Northwest Association for Biomedical Research
Brad Jurkovich, Public Affairs Consultant, Brad Jurkovich Consulting
Erin Riffe, Director, Afterschool Programs, Educational Service District #113
Brian Jaeger, Biz Development Educator, Seattle, Washington

Congressional Representative

Sean Murphy, Field Representative, Congressman Brian Baird

Evaluation Committee

Todd E. Johnson, Ph.D., CRC, Director, Center for Research and Data Analysis, ESD #113
Mike Hickman, Assistant Superintendent, Support Services, Educational Service District #113
Dan Gohl, Senior STEM Consultant, TIES Teaching Institute for Excellence in STEM
Bill Olfert, Research and Planning Consultant, CTE Services
Tom Hulst, Consultant

Office of the Superintendent of Public Instruction Resources

Mr. John Aultman, Assistant Superintendent, College and Career Readiness
Mr. Jim Ridgeway, Director, Secondary Education
Mr. Gene Wachtel, Program Supervisor, Science, Technology, Engineering, and Math (STEM)

C. Discussions

The Advisory Committee through this technical high school feasibility study were directed by Second Senate Bill 6377- Section 308 to examine and make recommendations on the following issues:

1) The definition of a technical high school and how a technical high school might differ from current comprehensive high schools, alternative high schools, or skill centers;

Recommendation was for a smaller group to explore this issue and gather large group consensus.

There is a need for further discussion regarding the definition of technical high schools. In fact, technical high schools across the United States have varied practices and definitions. However, one thing that was discussed was that these high schools need to be “innovative” and that they need to be responsive to the region they serve. In addition, these regional innovation high schools need to be responsive to the current and future educational requirements in enhancing student access to careers and post secondary access. It was also discussed that these schools would need to be committed, informed, and continuously implementing research-based best practices.

2) The governance structure for technical high schools, which may be within a single district, a cooperative of multiple districts, or other new governance structures that may be considered;

Recommendation was for a smaller group to explore this issue and gather large group consensus.

According to Second Substitute Senate Bill 5790 –Section 2; "*A skill center is a regional career and technical education partnership established to provide access to comprehensive industry-defined career and technical programs of study that prepare students for careers, employment, apprenticeships, and post-secondary education. A skill center is operated by a host school district and governed by an administrative council in accordance with a cooperative agreement.*" The group felt the need to explore and discuss further how these schools serving students from a large number of districts or who are physically located in other districts need to be governed.

3) Funding models and estimated costs to support technical high schools, including both operating and capital funds;

Recommendation was for a smaller group to explore this issue.

Attendees shared that funding issues arise when these schools are established with both private and state dollars, but that private dollars decline after initial start-up. This provides a challenge for the school to maintain equipment and upgrades to instructional tools. Several in attendance felt additional discussion is needed regarding how school district boundaries impact the movement and access to funding, and how remedial education dollars, I-BEST, scholarships, and other incentives for college and career could be used.

4) Whether technical high schools should focus on particular student populations or be structured as magnet schools or academies with a particular programmatic focus;

Recommendations were for the funding subcommittee to address issue and bring it to the Advisory Committee for consensus.

Evidence gathered from other states with technical high schools indicate that student acceptance criteria and processes can significantly limit access to traditionally underserved student populations. Several mentioned that enrollment in these schools should be less than 400 students which would be full-time equivalents and informed by current best practices and research. However, several did voice strong support for serving those who have been traditionally underserved.

5) Whether technical high schools should operate with a two-year or four-year program or with part-time or full-time attendance;

Recommendations were for the definition subcommittee to address the issue and bring it to the Advisory Committee for consensus.

For those in attendance, a primary mode of operation for these schools would be to operate as four-year full-time diploma granting integrated career and academic curriculum programs serving students from grade 9-12. However, based on individual student needs and choice these programs would need to have some variances.

6) The implications of accountability for student achievement with a technical high school, including adequate yearly progress.

Recommendations were for the definition subcommittee to address the issue and bring it to the Advisory Committee for consensus.

For most of the Advisory Committee they recognized the need for these schools to accept the current structure and requirements of the accountability measures of adequate yearly progress and educational growth of their student cohorts.

7) Options, strategies, and estimated costs for possible transition of selected current high schools or skill centers to a technical high school model.

Recommendations were for the funding subcommittee to address the issue and bring it to the Advisory Committee for consensus.

Those in attendance shared a positive response to having technical high schools in Washington State for enhanced student educational opportunities. They commented that they do not need to replace current structures, programs, and activities, but instead they see it as another opportunity to be responsive educationally to the region. It is still unclear, based on the first meeting, as to whether the group is thinking of the transition of skill centers, alternative high schools, or even comprehensive high schools at this time.

Recommendation was made by the Advisory Committee that representation at the next meeting include the following: Students, school districts, business managers, and organized labor representatives from education.

D. Summary

Meeting discussions and presentations highlighted that there has been a growing interest by higher education institutions and industry to bring engineering and technology principles and applications to secondary school classrooms. Technology education programs have been developed and implemented both nationally and local levels. Programs for science teachers have included training and curriculum development that integrates applications with scientific principles. Many of the efforts have attempted to align the content of the curriculum materials and activities with state content standards. Exposure to engineering principles has even been extended to include pre-service teachers.

There are several factors that impact student interest in the technological fields. Many students are not exposed to topics in these fields at all during their K-12 studies because K-12 teachers have not been trained in incorporating these topics into their programs. In addition, the curriculum materials need to fit the instructional classroom needs of the teachers by addressing the content standards in science and technology/engineering. Although curricular materials (Math Engineering Science Achievement (MESA) program and Project Lead the Way (PLTW)) are becoming more available in the technological fields and instructional strategies are necessary, they are not sufficient. Also necessary is adequate preparation and professional development for new teachers, training of the current teacher population, and the recognition of the pressure on teachers to align their instruction with the state content standards so that students are prepared to demonstrate achievement of the standards through statewide assessment tests.

III. Next Steps

1. Complete the Interim Report that includes recommendations and feedback from the Advisory Committee meeting.
2. Identify and recruit representation from 1) Students, 2) School District Business Managers and 3) Organized labor representatives from education.
3. Request and/or assign volunteers to do small group work for each of the following: Definition, Governance, and Funding. These groups will report back to the Advisory Committee.
4. Establish next meeting for mid-February 2009.
5. Create a consensus on the definition of what constitutes a "technical high school" or whatever other type of name the group decides.

IV. Work Plan

At the present time the second of three advisory committee meetings has not been scheduled, but based on feedback from representatives it will be scheduled for sometime in mid-February 2009. Below is the proposed work plan.

Date	Activity	Deliverables
PHASE I – Plan/Organize		
7/1/2008	Invite Advisory Board members	Advisory Board Membership Roster
7/7/2008	Confirm Advisory Board Leaders	Advisory Board Leadership Roster
7/15/2008	Meet with Advisory Board Leaders	Leaders Meeting Sign In Sheet/Agenda/Minutes
7/16/2008	Establish a meeting of ALL stakeholders	Stakeholder Meeting Invitation & Invitee List
8/11/2008	Stakeholder meeting review subcommittee activities/plans	Stakeholder Meeting Sign-in Sheet/Agenda/Minutes
9/1/2008	Subcommittee work plans	Sub-Committee Meeting Sign-in Sheets/Agendas/Minutes
10/1/2008	Reporting back subcommittee plans and needs	Stakeholder Meeting Sign-in Sheet/Agenda/Minutes
11/1/2008	Meet with Advisory Board to review Interim Report	Advisory Board Sign-in Sheet/Agenda/Minutes
11/15/2008	Finalize Interim report and current status	Technical High School Feasibility Study Interim Report
12/1/2008	Submit Interim Report to Governor, education and fiscal committees	Legislative Committee Minutes
PHASE II – Interpreting the input from stakeholders and policy makers		
1/2/2009	Revisions from Legislative and OSPI feedback	Revised Draft Interim Report

Date	Activity	Deliverables
2/1/2009	Reporting back subcommittee findings	Stakeholder Meeting Sign-in Sheet/Agenda/Minutes
2/15/2009	Meet with Advisory Board to review sub-committee findings	Advisory Board Sign-in Sheet/Agenda/Minutes
PHASE III – Reporting		
5/1/2009	Revisions and incorporation of workgroup feedback and comments	Draft Technical High School Study Report
5/29/2009	Meet with Advisory Committee Draft Final report	Advisory Board Sign-in Sheet/Agenda/Minutes
6/30/2009	Submit Final Report to Governor, education and fiscal committees	Feasibility Study Final Report

V. Conclusion

In conclusion, this Interim Report of the technical high school study includes completed activities and findings based on the first of three advisory committee meetings. A preponderance of the work still remains to be completed. This includes the recruitment of additional committee representatives, formation of sub-committees to work on issues of definition, governance, and funding, and gathering a consensus on what is an innovative Washington Technical High School.

Education experts say public schools must teach students 21st century skills to prepare them to compete in a global economy. Beyond the basic academics, these skills include the ability to work in teams, to think critically and solve problems, to use technology and to be able to communicate effectively across many media. All of these skills are effectively taught through project-based learning, with clear accountability standards and opportunities for students to hone their leadership and communication skills.

It is worth noting again that Washington State skills centers made up of small and medium sized school district cooperatives have served students effectively for over 40 years and been a contributing component of the State's workforce development system. It is also quite evident that there are several factors that impact a student's interest in the technical, technology, and engineering fields. However, creating or transitioning current high school programs to technical high schools could provide local and regional school districts an opportunity to meet the rigor, relevance, and relationships student need to succeed academically.